

## CLAIMS

- 1 1. A method for tracking and controlling e-mail forwarding of an encrypted  
2 document generated by a publisher from a user connected to a content server to  
3 a recipient user, comprising:
  - 4 (a) in response to a request from the user, preparing in the content server, an  
5 e-mail message that contains a link to the publisher and an identifier for  
6 the document;
  - 7 (b) sending the e-mail message to the recipient user wherein, upon receiving  
8 the e-mail, the recipient user logs onto a forwarding server at the  
9 document publisher;
  - 10 (c) receiving and resolving the link at the publisher and downloading a secure  
11 viewer program to the recipient user and an encrypted version of the  
12 requested document to the secure browser program;
  - 13 (d) requesting a decryption key for the encrypted document with the secure  
14 viewer program; and
  - 15 (e) decrypting the encrypted document and displaying the document content  
16 in the secure viewer program.
- 1 2. The method of claim 1 wherein step (a) comprises making the request to forward  
2 the encrypted document to the recipient user with a secure viewer running in a  
3 browser.
- 1 3. The method of claim 1 wherein the link in the e-mail message contains  
2 information identifying the sender of the e-mail, the recipient of the e-mail and the  
3 encrypted document.
- 1 4. The method of claim 3 wherein the information is inserted into the URL of the link  
2 to the publisher.

- 1 5. The method of claim 3 wherein step (a) comprises encrypting the identifying  
2 information in the e-mail message.
- 1 6. The method of claim 5 wherein step (a) comprises encrypting the information  
2 with a public key of a public/private key pair assigned of the publisher.
- 1 7. The method of claim 1 wherein step (b) comprises opening, in a computer of the  
2 recipient user, a browser in response to a selection of the link by the recipient  
3 user and navigating to the forwarding server.
- 1 8. The method of claim 7 wherein step (c) comprises downloading a secure viewer  
2 program into the browser in the recipient user's computer.
- 1 9. The method of claim 1 wherein step (c) comprises downloading a document  
2 identifier to the secure viewer program running in the recipient user's computer.
- 1 10. The method of claim 9 wherein step (d) comprises using the document identifier  
2 to request a decryption key from the forwarding server.
- 1 11. The method of claim 10 wherein step (d) further comprises returning the  
2 decryption key from the forwarding server to the secure viewer program in  
3 response to the document identifier.
- 1 12. The method of claim 1 further comprising logging the information in the e-mail  
2 including the sender, the recipient and the document identifier by the forwarding  
3 server.

- 1 13. The method of claim 1 wherein the link maintains a count of the number of times  
2 it has been selected.
- 1 14. The method of claim 13 wherein the link is a one-time link.
- 1 15. Apparatus for tracking and controlling e-mail forwarding of an encrypted  
2 document generated by a publisher from a user connected to a content server to  
3 a recipient user, comprising:  
4 means responsive to a request from the user for preparing in the content  
5 server, an e-mail message that contains a link to the publisher and an identifier  
6 for the document;  
7 means for sending the e-mail message to the recipient user wherein, upon  
8 receiving the e-mail, the recipient user logs onto a forwarding server at the  
9 document publisher;  
10 means for receiving and resolving the link at the publisher and  
11 downloading a secure viewer program to the recipient user and an encrypted  
12 version of the requested document to the secure browser program;  
13 means for requesting a decryption key for the encrypted document with  
14 the secure viewer program; and  
15 means for decrypting the encrypted document and displaying the  
16 document content in the secure viewer program.
- 1 16. The apparatus of claim 15 wherein the request to forward the encrypted  
2 document to the recipient user is made with a secure viewer running in a  
3 browser.

- 1 17. The apparatus of claim 15 wherein the link in the e-mail message contains  
2 information identifying the sender of the e-mail, the recipient of the e-mail and the  
3 encrypted document.
- 1 18. The apparatus of claim 17 wherein the information is inserted into the URL of the  
2 link to the publisher.
- 1 19. The apparatus of claim 17 further comprising means for encrypting the identifying  
2 information in the e-mail message.
- 1 20. The apparatus of claim 19 wherein the means for encrypting the identifying  
2 information comprises means for encrypting the information with a public key of a  
3 public/private key pair assigned of the publisher.
- 1 21. The apparatus of claim 15 further comprising means for opening, in a computer  
2 of the recipient user, a browser in response to a selection of the link by the  
3 recipient user and means for using the browser to navigate to the forwarding  
4 server.
- 1 22. The apparatus of claim 21 wherein the means for downloading a secure viewer  
2 program comprises means for downloading a secure viewer program into the  
3 browser in the recipient user's computer.
- 1 23. The apparatus of claim 15 wherein the means for downloading an encrypted  
2 version of the requested document to the secure browser program comprises  
3 means for downloading a document identifier to the secure viewer program  
4 running in the recipient user's computer.

- 1 24. The apparatus of claim 23 wherein the means for requesting a decryption key  
2 comprises means for using the document identifier to request a decryption key  
3 from the forwarding server.
- 1 25. The apparatus of claim 24 wherein the means for requesting a decryption key  
2 further comprises means for returning the decryption key from the forwarding  
3 server to the secure viewer program in response to the document identifier.
- 1 26. The apparatus of claim 15 further comprising means for logging the information  
2 in the e-mail including the sender, the recipient and the document identifier by  
3 the forwarding server.
- 1 27. The apparatus of claim 15 wherein the link maintains a count of the number of  
2 times it has been selected.
- 1 28. The apparatus of claim 27 wherein the link is a one-time link.
- 1 29. A computer program product for tracking and controlling e-mail forwarding of an  
2 encrypted document generated by a publisher from a user connected to a  
3 content server to a recipient user, the computer program product comprising a  
4 computer usable medium having computer readable program code thereon:  
5 program code operable in response to a request from the user, for  
6 preparing in the content server, an e-mail message that contains a link to the  
7 publisher and an identifier for the document;  
8 program code for sending the e-mail message to the recipient user  
9 wherein, upon receiving the e-mail, the recipient user logs onto a forwarding  
10 server at the document publisher;

11                    program code for receiving and resolving the link at the publisher and  
12                    downloading a secure viewer program to the recipient user and an encrypted  
13                    version of the requested document to the secure browser program;  
14                    program code for requesting a decryption key for the encrypted document  
15                    with the secure viewer program; and  
16                    program code for decrypting the encrypted document and displaying the  
17                    document content in the secure viewer program.

1    30.    The computer program product of claim 29 wherein the program code for  
2           preparing an e-mail message comprises a secure viewer program running in a  
3           browser that makes the request to forward the encrypted document to the  
4           recipient user.

1    31.    The computer program product of claim 29 wherein the link in the e-mail  
2           message contains information identifying the sender of the e-mail, the recipient of  
3           the e-mail and the encrypted document.

1    32.    The computer program product of claim 31 wherein the information is inserted  
2           into the URL of the link to the publisher.

1    33.    The computer program product of claim 31 wherein the program code for  
2           preparing an e-mail message comprises program code for encrypting the  
3           identifying information in the e-mail message.

1    34.    The computer program product of claim 33 wherein the program code for  
2           preparing an e-mail message comprises program code for encrypting the  
3           information with a public key of a public/private key pair assigned of the  
4           publisher.

- 1 35. The computer program product of claim 29 wherein the program code for  
2 sending the e-mail message to the recipient user comprises program code for  
3 opening, in a computer of the recipient user, a browser in response to a selection  
4 of the link by the recipient user and navigating to the forwarding server.
- 1 36. The computer program product of claim 35 wherein the program code for  
2 downloading a secure viewer program to the recipient user comprises program  
3 code for downloading a secure viewer program into the browser in the recipient  
4 user's computer.
- 1 37. The computer program product of claim 29 wherein the program code for  
2 downloading a secure viewer program to the recipient user comprises program  
3 code for downloading a document identifier to the secure viewer program running  
4 in the recipient user's computer.
- 1 38. The computer program product of claim 37 wherein the program code for  
2 requesting a decryption key for the encrypted document comprises program code  
3 for using the document identifier to request a decryption key from the forwarding  
4 server.
- 1 39. The computer program product of claim 38 wherein the program code for  
2 requesting a decryption key for the encrypted document further comprises  
3 program code for returning the decryption key from the forwarding server to the  
4 secure viewer program in response to the document identifier.
- 1 40. The computer program product of claim 29 further comprising program code for  
2 logging the information in the e-mail including the sender, the recipient and the  
3 document identifier by the forwarding server.

- 1 41. The computer program product of claim 29 wherein the link maintains a count of  
2 the number of times it has been selected.
- 1 42. The computer program product of claim 41 wherein the link is a one-time link.